

What Is Claimed Is:

1. A molding machine for producing a continuous extrusion molding product with varying profile comprising:

5 a die with an inlet for receiving molten material, a channel, and an outlet, the channel directing the molten material from the inlet to the outlet along a first axis; and

at least one shaping knife, rotatable around a second axis non-parallel to the first axis between a first operational position and a second operational position, the shaping knife having a first molding surface which defines a first contour in the outlet when in the shaping knife is in the first operational position, and defines a second contour in the outlet when the shaping knife is in the second operational position.

2. The molding machine as claimed in claim 1, wherein the shaping knife is rotatable around an axis perpendicular to the first axis.

3. The molding machine as claimed in claim 1, wherein the shaping knife is rotatable around an axis oblique to the first axis.

4. The molding machine as claimed in claim 1, wherein the shaping knife has a leading edge which is wedge shaped.

5. The molding machine as claimed in claim 1, wherein the outlet comprises a second molding surface.

6. A molding machine for producing a continuous extrusion molding product with varying profile comprising:

a die with an inlet for receiving molten material, a channel,

and an outlet, the channel directing the molten material from the inlet to the outlet along a first axis; and

a first shaping knife, rotatable around a second axis non-parallel to the first axis between a first operational position and a second operational position, the shaping knife
5 having a first molding surface; and

a second shaping knife, rotatable around a third axis non-parallel to the first axis between a first operational position and a second operational position, the shaping knife
10 having a second molding surface;

whereby the first and second molding surfaces together define a first contour in the outlet when the first and second shaping knives are in their first operational positions, and define a second contour in the outlet when the first and second
15 shaping knives are in their second operational positions.

7. The molding machine as claimed in claim 1, wherein the shaping knife is rotatable around an axis perpendicular to the first axis.

8. The molding machine as claimed in claim 1, wherein the shaping knife is rotatable around an axis oblique to the first axis.

9. The molding machine as claimed in claim 1, wherein the shaping knife has a leading edge which is wedge shaped.

10. The molding machine as claimed in claim 1, wherein the outlet comprises a third molding surface.

11. The molding machine as claimed in claim 10, wherein the molding product is automobile windshield molding have an outer wing portion, an inner wing portion, and a foot, the profile

of the inner wing portion varying between a first profile in which in the inner wing portion has a first thickness and a second profile in which the inner wing portion has a second thickness thicker than the first thickness, a water channel
5 being formed in the inner wing portion of the second profile, wherein:

the contour of the first molding surface corresponds to the profile of the foot;

10 the contour of the second molding surface corresponds to the profile of the water drain channel; and

the contour of the third molding surface corresponds to the outer wing;

wherein the contour of the outlet when the first and second shaping knives are in their first operational positions
15 corresponds to the first profile; and

the contour of the of the outlet when the first and second shaping knives are in their second operational positions corresponds to the second profile.

12. A method for producing a continuous extrusion molding product with varying profile using a molding machine comprising a die and at least one shaping knife comprising the steps of:

extruding molten material though an opening in the die when the shaping knife is in a first operational position defining a first contour in the opening to form a molding product with a first profile; and

gradually rotating the shaping knife about an axis non-parallel to the flow direction of the molten material to a second operational position defining a second contour in the opening to alter the profile of the molding product across a gradient range of intermediate profiles to a second profile.

13. The method as claimed in claim 12, wherein the molten

material is thermoplastic resin, elastomer, or foam resin.

14. The method as claimed in claim 12, wherein the shaping knife is rotated around an axis perpendicular to the plane containing the first axis.

15. The method as claimed in claim 12, wherein the shaping knife is rotated around an axis oblique to the plane containing the first axis.

16. The method as claimed in claim 12, wherein the shaping knife has a leading edge which is wedge shaped, and when the shaping knife is rotated from the first operational position to the second operational position, the wedge cuts into the flow of molten material.

17. The method as claimed in claim 12, further comprising the step of rotating the shaping knife from the second operational position to the first operational position.

18. A method for producing a continuous extrusion molding product with varying profile using a molding machine comprising a die, a first shaping knife and a second shaping knife comprising the steps of:

extruding molten material through an opening in the die when the first and second shaping knives are in a first operational position together defining a first contour in the opening to form a molding product with a first profile; and

gradually rotating the first shaping knife about a first axis perpendicular to the flow direction of the molten material to a second operational position and gradually rotating the second shaping knife about an axis oblique to the flow direction of the molten material to a second operational position, the

second operational positions of the first and second shaping knives defining a second contour in the opening, to alter the profile of the molding product across a gradient range of intermediate profiles to a second profile.

19. The method as claimed in claim 18, wherein the molten material is thermoplastic resin, elastomer, or foam resin.

20. The method as claimed in claim 18, wherein the first and second shaping knives each have a leading edge which is wedge shaped for cutting into the flow of molten material.

21. The method as claimed in claim 18, further comprising the step of rotating the first and second shaping knives from their second operational positions to the first operational positions.